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REGENERATING PRODUCTION:
WHITE WOMEN AND BLACK MEN IN WORLD WAR II

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AFRICANA

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Introduction

With the introduction of democracy in South Africa, legal mechanisms of discrimination based on race will be abolished; however, this paper seeks to explore historical examples of discrimination which operated outside the legal structure and which relied on pervasive cultural constructions of gender as well as race. The connection between racism and sexism in South Africa has been viewed primarily through the overarching constrictions of apartheid, the system of legal racial stratification which disenfranchised 80% of that country's population. Issues of sexual oppression have been characterized as being layered or grafted on to racism, intensifying oppression to a stage of "triple oppression" (race/sex/class) for African women. But few scholars have been satisfied with this paradigm and today, with legalized racism abolished, it is appropriate to reexamine the historical connection between racial and gender discrimination, problems which may not disappear despite the establishment of democratic rule in South Africa. It is the purpose of this paper to demonstrate that constructions of gender and race in South Africa are interconnected and have been used to reinforce discrimination and stratification on both counts.

The paper will focus on the introduction during World War II of both white women and African males into jobs previously held by white males. At the beginning of the war, it was apparent that South Africa faced a serious shortage of labor based on pre-existing regulations and restrictions concerning employment. While most factory jobs were legally classified for white males only, military service was also restricted to that group, prompting a shortage of workers in the expanding armaments factories inside the country. While the government looked for workers to operate the state-established factories, unions struggled to safeguard the interests of their white male members by holding the line at both race and gender. As Iris Berger notes in her comprehensive study of organized women workers, both race and gender were viewed by union officials as comparable boundaries and the weakening of one could lead to challenges to the other. Despite differences in the way individuals were viewed based on their race, women were considered a subordinated group as were "Non-Europeans," and their entry into the workforce threatened the prevailing social perception of "workers."

Differences in the constructions of gender, however, depicted women as home-bound and thus logically temporary workers while males--black and white--were automatically considered a permanent workforce. Based on these gender constructs, white women were viewed as less threatening than black males and union officials were convinced to allow them into jobs previously held by white males on the assumption that they would peacefully vacate the jobs at the end of the war in favor of returning white males. Extending the logic of these gender constructs, the jobs were transformed into "women's work" and the women were paid less than white males since it was assumed that they were not their family's sole breadwinner. This process, which both feminized and deskilled the jobs, usually amounted to dividing several skilled tasks formerly performed by one white male employee between several females: the assumption was that women could not perform such complicated work. According to the discourse which justified their inclusion in the workforce, the jobs were thus made appropriate for a subordinated group and the women, depicted as loyal wives and mothers serving their country, rendered non-threatening. In reality, they were poor and desperate women struggling to support their families. When the war ended, they were summarily dismissed and in some cases physically removed to their homes. Service to their country had ended.

But the significance of their service soon became apparent. Their jobs, already devalued, were filled not by returning white servicemen but by far less expensive black male workers. The jobs had been re-classified through the South African government's restrictive labor bureaucracy

as "semi-skilled" making it legal to fill them with Africans. The restructuring of the workforce during the war had created new opportunities for African workers eager for jobs and for white employers anxious to lower labor costs during the postwar inflation. The "feminization" of factory work during the war opened up the possibility of using a wide range of workers not previously considered acceptable. All of this was done despite comprehensive government control over the economy during and after the war and a dominant ideology of white male privilege.

This paper will challenge previous analyses of the shift towards African factory labor (Webster, Lewis) by focussing on the unofficial, pervasive and hegemonic constructions of race and gender which served to facilitate this shift. While gender discrimination has not been viewed as an integral part of apartheid and its antecedents, there have clearly been connections between race and gender which have helped to form the fabric of South African society. The question today is whether democracy, any more than apartheid, can directly address the problems arising from social constructions--race and gender--or whether such examples will continue to form South Africa's future as well as its past.

Production in Wartime South Africa

During World War II, the pace, structure, color and gender of South African industrial production changed profoundly. The dramatic jump in demand for goods, including munitions, consumer goods and previously imported machinery all created massive pressures on government, employers and workers to meet new challenges. And this pressure also opened opportunities for a shift in the relations and balance of power between these groups. Nowhere were such opportunities more sought after than in the engineering industry, suddenly at the forefront of production of South Africa's most crucial war products, bombs and ammunition. While national security remained paramount, the government, producers and employees all maneuvered to preserve, extend or redefine power which could be carried into the postwar period.

At stake during the war was the very nature of production, already hotly contested in the years before the war. In particular, what methods would be used to transform the use of tools for individual repair and limited production into standardized mechanical production, perhaps on a massive scale? And who would form the expanded work force necessary for such production? Most engineering firms were naturally eager to lower their costs by employing workers at low wages. Workers in the engineering industry suspected a diminution of power and wages. And the government feared the temporary creation of a new work force which would demand continued employment after the war. Above all, the ever dominant interests of the mining industry were directly involved in this struggle as the gold mines were both the major consumer of engineering products as well as the largest employer of skilled engineering artisans in the country. No solution would be found which did not take into account the interests of the major revenue producer in the country, the mines.

The changing nature of the engineering industry during the war has been examined from several perspectives. Both Lewis and Webster, in their comprehensive analyses of long term change in the engineering industry, identify World War II as a pivotal period during which ongoing changes in the very nature of production accelerated and were entrenched, leading to redefinition of skill, work and employees' power. The introduction of "machinofacture," as Webster calls it, and the "scientific management" of the production process (Lewis) led to deskilling, dilution and increased control by management over the production process. As Webster states, "the war provided capital with the opportunity to go on the offensive."¹ Lewis is more circumspect, "It was the advent of the second world war which made possible the transformation of the engineering industry and the traditional division of labour upon which it

1. Eddie Webster, *Can in a Racial Mould: Labour Process and Trade Unionism in the Foundries* (Johannesburg: 1985), p. 55.

rested."² In particular, African workers were increasingly brought into more responsible jobs as employers successfully undermined the position of the skilled artisans. Both authors view such change within a Marxist critique, as an instance of clear cut class struggle while Lewis also borrows from Braverman to explain shifting mechanisms of control. And yet in both cases, there is little discussion of the actual transition to "machinofecture," the concrete introduction of new workers into new jobs; we are, however, presented with the accomplishment of such change and the introduction of African workers into the industry.

From a different perspective, Iris Berger has touched upon a crucial example of the type of change which occurred during the war. Berger is also interested in class analysis, and presents a comprehensive description of women's struggles as part of the South African working class. Focussing on union activities while giving gender a central analytical role, Berger traces the shifts, activities and successes of South African women. While most of her examples come from the garment and food processing industries, where women have traditionally predominated, she includes one chapter on "Women in Wartime Production" which chronicles the activities of the short-lived Women Engineering Workers' Union.³ Indeed, the story seems nearly out of place in Berger's narrative as she concludes by saying, "Thus, in accord with their designation as 'emergency workers,' the story of women employed in munitions factories occupies only a brief chapter in the history of women's work in South Africa."⁴ The short period of female employment in the engineering industry appears almost irrelevant to the long term development of a female working class. Yet their impact on the labor structure of the engineering industry was crucial. It was female war workers who were first used to break down barriers not only of gender, but of skill and ultimately race.

This paper will present the story of women war workers in the engineering industry in order to argue that during this period gender was used by all concerned as a mechanism to insure control into the postwar period. Union and government officials acceded to the use of women in the expanding engineering work force because both groups believed that women, due to perceptions of gender, constituted a temporary work force which could be easily disposed of after the war. Employers, on the other hand, and especially the mine's own workshops, welcomed the women who could not only be paid less than white males but who also offered ample concrete proof that many engineering jobs required levels of skill and experience which were much lower than was claimed by the unions. The use of the women and the re-definition of many jobs on the basis of concepts of gender--that is, the simplification or "deskilling" of tasks--paved the way for the eventual introduction of Africans into many of these jobs. While the women themselves were well aware of the pressures surrounding their position, they were placed in a precarious situation by all sides. The government categorized them as "temporary" at the outset of the war and while the Unions fought for equal pay, they never fought for these workers' security. Employers would eventually back away from workers who had undermined the labor hierarchy of skill but were trapped in the union wage scale. Nevertheless, constructions of gender would prove useful in redefining this work based on constructions of race. Thus the history of women workers can neither be separated from that of industrialization nor of racial stratification in South Africa.

Assessing the Problem

Following South Africa's entry into the war, it took well over one year for government planners, union officials and private businessmen to fully understand the scope of change required of the country. South Africa's role in the war, the extent of military conflict and the continuing

2. Joe Lewis, *Industrialization and Trade Union Organization in South Africa, 1874-55: The Rise and Fall of the South African Trades and Labour Council* (Cambridge: 1984), p. 91.

3. Iris Berger, "Nimble Fingers and Keen Eyesight: Women in Wartime Production," in *Threads of Solidarity: Women in South African Industry, 1900-1980* (Ithaca: 1992), pp. 131-145.

4. Berger, p. 144.

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availability of imports were yet to be determined. At most, Prime Minister Smuts had agreed to supply the Allies with certain raw materials, especially coal, and significant amounts of ammunition.⁵ Coal production could be stepped up through the increased use of unskilled and easily obtained African labor. And production of ammunition was quickly organized under the auspices of the government at facilities with the proper tools for such production, the South African Mint and the workshops of the South African Railways (SAR). Yet as developments in the European war intensified with the invasion of France, it became increasingly apparent that South Africa was on its own in terms of many expected imports. By August 1940, the government was organizing the production of everything from bombs to biscuits. Industrial as well as military mobilization was at hand.

There were two major and interconnected problems the country faced in meeting production demands: lack of either the appropriate machinery or the appropriately skilled worker to produce such goods. The Defense Department had quickly placed orders for the machinery necessary to produce weapons and ammunition on a mass scale, but by spring 1940 it became apparent that such orders could not be met from overseas. The Director General of War Supplies (DGWS) stated, "It was only after the invasion of Holland and the rapid sequence of events that followed that it became clear we must reckon on the possibility of our being thrown on our own resources for most of our supplies."⁶ And the country possessed impressive resources for such production including a steel plant, unlimited coal and electricity, "two of the world's largest single units of explosive production," existing engineering shops and substantial secondary industries.⁷ The government could also count on masses of unskilled labor. The problem was that without facilities for mass production, war materials would have to be produced by highly skilled labor using the only tools at hand which were somewhat specialized. In some cases, artisans were used to design and produce more tools and simplified machinery; nevertheless, it became apparent that machinery would not be available to substitute for a far more scarce, and politically sensitive commodity, skilled labor.⁸

The government was forced to "farm out" munitions work to small workshops where tools, not machines, were available resulting in the government's admission that "the use of skilled labour by such methods is more extravagant than if special purpose plants had been designed and built before production started."⁹ Lacking the necessary machinery to turn its vast resources into the required military items through mass production, the government would be forced to call upon the extensive use of skilled labor.

South Africa's rigid structure of industrial labor organization, enforced both through legal statutes and labor agreements, and reflecting the historical development of racial and class stratification inside the country, would make such demands highly problematic. Initial industrial organizations had stemmed from the mining industry which by 1911 under the Mines and Works Act had been solidified into categories in which race and skill were synonymous. Unskilled work was designated for "Labourers," i.e., Africans while "employees," or whites, were given more rights and better pay. As further industries grew inside the country, this rough categorization spread equating skilled work with white workers and unskilled with Africans. Yet the wide array of operations carried on in factories and workshops increasingly opened up contested positions requiring some skills but not those of the full journeyman class which had dominated skilled

5. H.J. Orgen and Neil D. Orgen, *South African Forces, World War II, Volume 3: South Africa at War, Military and Industrial Organization and Operations in Connection with the Conduct of the War, 1939-1945* (Cape Town: 1978).

6. H.J. van der Bijl, "DGWS Report on Organization, Principles of Purchase and Production," 14 August 1940, p. 5, *Papers of the Industrial Manpower Commission*, Bc 625, University of Cape Town.

7. *Ibid.*, pp. 13-16.

8. *Ibid.*, p. 24.

9. T.P. Stratton, Director Technical Production, "Notes on Buying and Production Policy from the Aspect of Labour Utilization," 28 October 1941, *Tucson Papers*, Dc 9.12, University of the Witwatersrand.

positions. The journeymen were careful to preserve their position and in the 1927 Industrial Agreement for the Iron and Steel Manufacturing and Engineering Industry, the Amalgamated Engineering Union (AEU) recognized that several occupations "of a purely repetitive nature might be performed by employees other than journeymen at about 3/4 of the journeyman's rate of pay."¹⁰ Of course such "employees" would be white males. The AEU, the largest of the craft unions, began to admit such workers while the Ironmoulders Society (IMS) and the Mechanics Union (MUJE) staunchly refused.¹¹ During the 1930s, the issue became highly politicized by Afrikaner nationalists trying to create an economic niche for their constituents in industrial South Africa while employers were becoming increasingly interested in moving less expensive Africans into such positions. Indeed, just before the outbreak of the war, three black unions claimed to represent African steelworkers and the government was considering recognizing one African union in the metals industry.¹² As Lewis and Webster both demonstrate, the established unions were faced with the question of whether to define themselves by skill or race in order to protect their privileges.

The massive expansion of industrial employment prompted by the war thus threatened to destroy the precarious position of white workers, especially since the greatest pressure fell on those at the top of the hierarchy, the artisans. If their position was undermined, then justifications based on skill would be hard to maintain for other white workers. Above all, the unions wanted to maintain distinctions based on skill which were interpreted as synonymous with race. Most discussions concerning labor during the war were framed by the unions solely in terms of skill.

Initially, both unions and government planners hoped that the existing ranks of the artisans would be sufficient to meet the country's military requirements. In January 1940, the Department of Labour reached agreement with the Industrial Council concerning the emergency use of labor during the war. Under the terms of the agreement, artisans would be moved from other industries into munitions and war supplies and only in the absence of any available artisans would employers be allowed to hire "emergency workers." In what would prove to be unwarranted optimism, the agreement stated, "Applications for employment as emergency workers in the industry shall be invited in the first instance from unemployed artisans in other industries." Emergency workers were to be appointed by the Industrial Council, but there was surprisingly little direction given considering that these workers would be required to perform some journeyman duties.¹³ It appeared that the parties felt they might have little resort to such labor based on their attention to it.

But artisans were not freely available from "other industries," especially not the gold mines. As the DGS later noted, there had been a "noticeable" shortage of skilled artisans in South Africa well before the war during the 1930s when the gold mining industry undertook substantial expansion in newly discovered gold bearing areas.¹⁴ The mines had managed to hold on to the vast majority of their artisans during the war, employing approximately 4800 in 1944, as compared with approximately 4600 for the entire engineering industry.¹⁵ Even when the demand for artisans for ship repairs at the nation's ports was critical for Allied naval operations, the gold mines' artisans remained untouched.¹⁶ In June 1940, an estimate was prepared of the number of

10. Memorandum by Safema, 19 October 1944, 32/5/1, volume 3, REN 462, Central Archives Pretoria.

11. Lewis, *Industrialization and Trade Union Organization in South Africa*, pp. 21-22.

12. Divisional Inspector to Secretary of Labour, 3 August 1935, LC1058/21-4, ARB 1103. Minutes of Meeting Industrial Council for the Iron and Steel Manufacturing and Engineering Industry, Transvaal, 8 December 1939, LC1058/21-7, Part II, ARB 1105, Central Archives Pretoria.

13. "Draft arrangement for the admission and control of emergency labour into the Iron and Steel and Engineering Industry for the duration of the War," 26 January 1940, 11/5/2, ARB 1357, Central Archives Pretoria.

14. DGS Circular No. 7, 1 February 1944, MED Volume 28, Central Archives Pretoria.

15. DGS Circular No. 11, 28 June 1944, MED Volume 28, Safema Memorandum, 19 October 1944, 32/5/1, volume 3, REN 462.

16. DGS Circular No. 11, 28 June 1944, MED Volume 28.

businesses which would be hurt by any reduction in the mining industry.¹⁷ Indeed, government planners continually referred to the fact that the country's postwar industrial development remained dependent on its largest consumer, the mines.¹⁸ Furthermore, the country's gold and diamonds were crucial for purchases as well as weapons production. If artisans were needed for war production, they would not be found in the mines' workshops.

Emergency Workers and Dilution

The subsequent and necessary introduction of "emergency workers" finally necessitated serious thought, discussion and struggle over the terms and conditions of these workers' employment. By May 1940, emergency workers had been hired at Iscor, the steel producer owned and operated by the government. They were hired as moulders with the expectation that the artisan moulders already employed would train them. The moulders union, the IMS, had already refused to agree to what it called "dilution," an interesting term in wide use throughout the war referring to the weakening of pre-existing labor ranks and used in the armed forces as well with regard to the introduction of black and Coloured troops.¹⁹ They refused to train the emergency workers at Iscor and objected that such workers were being used for more than military production.²⁰

Barring the training of such workers on the job, and probably to avoid any further refusals, in July 1940 the government instituted its own training program, the Central Organisation of Technical Training (COTT). This program was to provide shortened and intensified basic training for technical personnel to obviate the need for either extended apprenticeships or the awkward and reluctant training on the job. More than 1400 trainees entered at that time. For a variety of reasons, however, the scheme failed to provide any significant numbers to industry. Out of approximately 26,000 trainees admitted to the program, only 306 were ever posted to industry. Most--22,000--went into military service and civilians were no longer accepted after July 1942. More than 3,000 civilians had simply dropped out of the program. The program failed dismally in its original purpose but left over 22,000 trainees with a government promise of postwar employment, one of the inducements to join, which worried government planners for the remainder of the war.²¹

By September 1940, both the government and the unions feared the worst. For their part, government planners were concerned if they would ever find sufficient workers for the industry, establishing a special labor committee for the engineering industry.²² The unions, on the other hand, feared the creation of a large-scale and quickly trained skilled and semiskilled work force which would undermine their positions and their wages in the long term. In order to meet both positions--provide labor which would not threaten the long term interests of the unions--the Industrial Council agreed that emergency workers could be used on Grade II operations (referred to as operatives rather than journeymen) and that women would be allowed in such positions. While the unions stopped short of allowing "dilution" of the journeymen positions, they did allow it one step down, admitting that relatively little training was involved there. Even then, such an admission was allowed largely with regard to a group automatically assumed to be "temporary," women, and which would not breach the racial barriers by stipulating that the women should be white. Eventually 3211 women would become emergency workers as compared with only 827

17. Chart showing firms and their dependence on gold mining industry, 7 June 1940, Industrial and Agricultural Requirements Commission, IRC 6, volume I, E302.3, Central Archives Pretoria.

18. H.J. van Eck to Minister Economic Development, 10 September 1943, 3/35 volume II, MED 22.

19. Kenneth W. Gravelle, *Soldiers Without Politics: Blacks in the South African Armed Forces* (Berkeley and Los Angeles: 1953), p. 77.

20. Inspector Labour to Secretary for Labour, 16 May 1940, 11E3/1, ARR 1557.

21. History of Manpower Control, Papers of the Industrial Manpower Commission, Bc 325.

22. DGS Report No. 6, 9 September 1940, DGS 382.

males.²³ In addition, many more women would be hired outside government channels to enter the country's factories.

Women War Workers

Employers, and especially the gold mines, proved eager to hire these women. The unions, especially the AEU which represented the operatives who were most directly affected by the introduction of women, and the MUJE, quickly found that by November 1940 the mines were making full use of female emergency labor. The problem for the unions was that the emergency workers were being paid between 1/4 d. and 1/8 d. per hour, the agreed rate for emergency labor, as compared to the Grade II rate prevailing in the mines' workshops, 2/1d. to 2/4 d. per hour.²⁴ While the unions had agreed to the lower rate in terms of munitions production only, their fear (later realized) was that such workers would also be used for the regular commercial work of the mines. Indeed, the original agreement on emergency labor from January 1940 had created a huge loophole for producers by stipulating only that such labor could be used "for the production of munitions and war supplies or to enable the Industry to continue its normal or expanded services to the country generally [author's italics]."²⁵ Furthermore, the unions were obviously concerned that lower wages for similar work would eventually undermine their own wage structure.

The gold mines responded to union requests immediately, but with a certain amount of subterfuge. In December 1940, the Gold Producers Committee of the Chamber of Mines agreed to pay emergency workers the rate requested by the unions, i.e., 2/1 d. to 2/4 d. per hour. However, the mines were allowed to draw such workers "from any suitable source," and left their recruitment largely in the hands of the Chamber. More importantly, nowhere in the agreement was the gender of emergency workers mentioned.²⁶ By February 1941, the AEU began to complain bitterly as female workers were moved into Grade II positions in the workshops at the lower rate.²⁷ The gold mines stuck to this position, finally forcing the unions to accept female emergency labor at lower rates of pay in exchange only for the assurance that "such labour be used for the duration of the war only, and be not required to perform any normal mine work or skilled work."²⁸ Again, the assumption would be made that white women constituted temporary workers who would naturally return home at the end of the war.

The agreement was reached approximately one week after the government had declared the entire engineering industry controlled, with the notable exception of engineering shops in the mines and the SAR. Under the terms of control, skilled workers could not change employment without the consent of the government; by October 1941 their wages were frozen and later in the war they were subject to transfer by the government on grounds of national security.²⁹ Skilled artisans were thus under government, not union, control as were the new entering emergency workers who were employed as Grade II operatives. These measures severely undercut the power of the unions. Furthermore, employers were allowed to hire workers who did not fall under any of these controls, that is, to bring in females not designated as skilled or emergency workers and certainly not represented by a union. And in another move to meet the need for skilled workers, in November 1941 the government required every employer in the controlled industry to employ one additional apprentice for any employed apprentice who had completed three years training. While this appeared to strengthen the hand of the unions, by adhering to the principle of apprenticeship,

23. Industrial Council Memo, 1944, 1812/1/17-20G, ARB 1816.

24. G.H. Beatty to Director Technical Production, 19 November 1940, 1183/9, ARB 1558.

25. "Draft arrangement for the admission and control of emergency labour into the Iron and Steel and Engineering Industry for the duration of the War," 26 January 1940, 1183/1, ARB 1557.

26. Gold Producers Committee to AEU, 6 December 1940, cont 1/24 Part I, ARB 1948.

27. AEU to Gold Producers Committee, 13 February 1941, 1183/9, ARB 1558.

28. Gold Producers Committee to MUJE, 25 March 1941, 1183/5, ARB 1558.

29. "Manpower," Papers of the Industrial Manpower Commission, Bc 825.

it also seriously undermined standards of training: apprenticeships were cut from five to three years with workers being employed as artisans at that time.³⁰

In the meantime, women were being hired at government plants, mining workshops and private engineering firms throughout the country. Two thousand were already at work at the South Africa Mint in Pretoria by October 1941, producing bombs and ammunition and working on several machines including lathes.³¹ Five hundred women were similarly employed at Stewarts and Lloyds, a private engineering firm, and thirty at Cofac, the government ordnance factory.³² Interestingly, the one mine workshop visited by the Inspector of Female Labour at Geduld Mines in Springs, employed the women on bomb work but they "have gradually been trained to take complete charge of the finishing machines and displace journeymen."³³ This report confirmed the worst fears of the unions.

By the end of 1941, the unions realized that they had a serious problem. They brought the matter before the Industrial Council, especially with regard to the fact that there were "two different pay rates for parallel lines of work" (munitions and normal production) and that "means are now being sought to extend the scope of women workers to the Journeymen's occupation." While the boilermakers and the moulders had admitted some male emergency workers, it was the AEU, representing operatives, which was hit hardest. The union found female Grade II operatives, paid at the lower mining rates (1/4 d. to 1/9 d.) being moved up to increasingly more skilled work. The union was very clear in its objections:

"a cheaper class of labour will have been trained and demonstrated its ability to discharge the work and will have the effect of (a) inducing the Industry to endeavor to retain this standard when profit control is no more, or (b) compel the Industry to demand this standard as a result of the Consumer's awareness of the cheaper cost of production. For these and similar reasons in the matter of allowing women to engage upon aspects of Journeymen's work, the Unions cannot agree that work which otherwise would have to be performed at least at approximately 2/10 1/2 d. per hour, may be performed at 1/9 d. and at such figure above that amount as an employer might estimate the production of the woman worker. Not because of the immediate danger in established wage standards, but because of the danger inherent in training a large number of persons to perform such work at a lesser rate for Post-war purposes [author's italics]."³⁴

The AEU wrote directly to Prime Minister Smuts, expressing concern that compromises over wages and training standards might prejudice workers following the war.³⁵ Despite all of the government's assurances, however, the AEU had little success stemming the tide of women in increasingly more responsible jobs at lower pay. Even at the government-run Central Ordnance Factory (Cofac), the union found 38 women employed as "women operators" at rates of pay varying from 1/4 d. to 2/3 d. per hour, with the bulk between 1/4 d. and 1/9 d.³⁶ The union reiterated its demand for "equal pay for equal work," i.e., 2/1 d. - 2/4 d. per hour.³⁷ Even a threatened ban on female emergency workers failed to move the government, which by May 1942 issued regulations governing female workers which allowed them to be employed on general production--not just munitions--and raised the wages only slightly to 1/5 d. to 1/10 d., and 2/3 d.

30. Ibid.: Controller Industrial Manpower to Transvaal Apprenticeship Committee, 29 August 1941, com 1/24, Part I, ARB 1948.

31. Inspector female labour to Controller Industrial Manpower, 5 October 1941, com 1/39/1, ARB 1971.

32. Inspector female labour to Controller Industrial Manpower, 8 and 9 October 1941, com 1/39/1, ARB 1971.

33. Inspector female labour to Controller Industrial Manpower, 7 October 1941, com 1/39/1, ARB 1971.

34. Industrial Council Memo, 15 December 1941, com 1/37, SCTV Part II ARB 1959.

35. Draft reply Smuts to AEU, 1 December 1941, 1183, ARB 1257.

36. Wage sheet, Central Ordnance Factory, 1 September 1941, com 1/37, SCTV Part I, ARB 1959.

37. AEU to Controller Industrial Manpower, 30 March 1942, com 1/37, SCTV Part I, ARB 1959.

to 2/5 d. for journeymen's work, as compared with the male rate of 5/- d. 3g Yet even those rates were often eased at an employer's request.³⁹

Thus the unions, and especially the AEU, had lost control over several classes of employees: emergency workers were under the Controller of Industrial Manpower, workers at the mines and SAR were exempted from control and the closed shop principle specifically excluded female workers. Large numbers of women entering various engineering shops, and especially those at the mines, were subject only to their employers' interpretation of their rights. Therefore, in April 1942--as government appeals were failing--the South African Trades and Labour Council began a drive to try to gain control over these women by establishing the Women Engineering Workers Union for female employees at any engineering, mining or ordinance factories inside South Africa.

Female Unionization

Under the direction of the South African Trades and Labour Council (SATLC) and in conjunction with the AEU, a union for women in the engineering industry was organized in 1942, beginning with the government's munitions plant at the South African Mint in Pretoria.⁴⁰ The SATLC chose the Pretoria plant for the inauguration of the union perhaps because it employed more women than any other employer in the industry: over 1400 female "operators" worked at the Pretoria Mint as compared with an addition 2700 scattered throughout workshops on the Witwatersrand, at least one-third of whom were "emergency workers" and thus exempt from union membership.⁴¹ With considerable assistance from the AEU, both in terms of interventions with Mint management as well as office support, the union was established with 740 members by the end of May.⁴² At that time, a constitution was written and approved by the membership which state the "objects" of the union, including "to consult with the South African Trades and Labour Council on all matters affecting the interests of members of other engineering and allied trade unions."⁴³ Although established to represent women throughout the engineering industry, the union never extended its membership beyond the women employed by the South African Mint, including its branches at Pretoria, Johannesburg and Kimberley, and some women at Cofac. Accounting for a majority of those women employed in engineering, however, the union's activities had a great impact on the place of women, and relative concepts of gender and race, in the future of manufacturing.

Within months of its inception, the Union reached agreement with the South African Mint over the terms of the women's employment. Their jobs were broken down into four categories, with specific descriptions of duties which could not be equated with journeymen's work; while there were overseers and supervisors listed, some machines were adapted for single use operations only, "deskilling" operations. Interestingly, all wages were exceedingly low, the highest at 2/2 d. for a female overseer, while most including "General Operators," fell even below the emergency workers wage of 1/4 d. to 1/9 d. In exchange, management held open the possibility of "bonuses" or "piecwork" for the lowest paid groups as a way to increase the wage.⁴⁴ Evidently the AEU and SATLC, directly involved with the union, were willing to go along with lowered wages and even the introduction of piecwork in exchange for the clear delineation of skills between these female workers and their own journeymen. They were most concerned to prevent

38. "Manpower," Papers of the Industrial Manpower Commission, Bc 825.

39. Industrial Council to Union, 6 May 1942, con 2/1, ARB 2003.

40. "Women Engineering Workers Union," May 1942, TUTSA papers, AH646, Dd 9.18.

41. "Employment Government Munitions Plants, October 1944, 16/5/11, DGS 217; "Emergency Labour," 7 February 1942, con 1/37, SCIV Part II, ARB 1959.

42. "Women Engineering Workers Union," May 1942, TUTSA papers, AR646, Dd 9.18.

43. Constitution of the Women Engineering Workers Union, May 1942, Tutsa Papers, AH646, Dd 17.115.

44. Agreement entered into between South African Mint and Women Engineering Workers Union, 21 September 1942, con 27 SC, ARB 2003.

an erosion in the value of skill, and as long as skills were disaggregated they felt no threat.

But the union organizer, Frances Engela, ran a running battle with Mint management for the rest of the war, trying to force compliance with even the minimal conditions of the agreement. She found that it sometimes took months for an employee to receive an earned raise or to be paid for a promotion; that lathe operators were paid only 1/5 d. per hour; and that the promised piecework and bonuses never materialized.⁴⁵ Indeed, although a commission of inquiry was called by the Department of Labour to examine work conditions at the Mint, a second, revised labor agreement gave the workers even less than before, retaining the same wage scale but removing any mention of piecework because "the Treasury ... considered that piece work was contrary to public policy and should be abolished."⁴⁶

Widespread and pervasive misperceptions about the character of the female work force were used to justify such unfair treatment. As the Industrial Council acknowledged in 1941, women were brought into munitions work as "workers who had qualified to fill their jobs for whom employment would not exist" after the war. Neither the unions nor the government wanted an additional group of workers who wanted employment after the war in an economy primarily based on low paid, unskilled, disenfranchised labor. Women, believed to be expendable in that they could return home to be supported by a father or husband after the war, appeared to be most convenient.⁴⁷ There was never the slightest consideration by the government, and certainly not by the unions, to allow these women to stay in jobs which might be claimed by white males after the war, or for which there might be no need at all if peacetime manufacturing could not expand to an extent to absorb these jobs.

Were such assumptions concerning these women justified? Certainly not. Despite the enormous privileges afforded whites in South Africa, the white women who entered the war industries were drawn from that segment of the white community which had, up to 1940, benefitted least from white political domination. When the recruitment of women began in earnest in 1942, the head of the Women's Section of the Controller of Industrial Manpower, Mrs. Cameron-Swan, was told to recruit soldiers' wives first, then "deserving cases," that is, those in dire financial need. As she reported in September, over 1800 women had applied, "most deserving with children from 1 - 11 in number unplaced. Five being a fair average number in a family."⁴⁸ At a closer look, possible in the case of the SA Mint where Frances Engela collected statements from the women, a common pattern in these women's lives emerges. Few had husbands in the military and most were in fact the main support of their families. For example, the statement of Mrs. C.J. Muller personifies the common contradictions in these women's lives between expectations, privilege and personal failure:

"I was married in 1911. My husband was a farmer at the time, but owing to drought, etc. it was impossible to continue so we came to town and he joined the army in the South West African campaign in 1914. On his return from German West he went to German East Africa, he was eventually demobilized in 1918. For months after his return from East Africa he was laid up in hospital with Blackwater fever and afterwards rheumatic fever. It is definite that his health afterwards was very poor and it was with the utmost difficulty that we were able to eke out a living. He obtained employment with the SAR as a labourer at a salary of £19 per month, but the wages gradually deteriorated until he received no more than £13 per month. Meanwhile I had to rear our 9 children on this inglorious wage. I was

⁴⁵ WFTU memo for Controller Manpower re Union-SA Mint agreement, March 1945, con 27 SC, ARB 2003.

compelled to do all my own work and could never afford a servant. When the present war came my husband was employed as a labourer at Union Buildings and as it was impossible to keep the house on his wages I found employment at the SA Mint." 49

The stories repeated the same scenario, with the ironic expectations of the economic rights of whites with the grinding realities of borderline poverty: "I am not living in luxury on the contrary our existence is a hand to mouth affair." 50 These women had little leverage against employers who valued their race but not their gender. Indeed, these women were vulnerable to vicious racist arguments of the incipient Afrikaner trade unionists who warned them of "godlose kommunis" and "n swart proletariaat." Engels wrote to the Controller of Manpower, "It is significant that these men are endeavoring to capture my Union on racial lines, and, it is important to remember that it is being manipulated by the anti-war element in one of the most important war factories in South Africa." 51

In an interesting move, the union, which had changed its name to the South African Mint Employees Union in 1944, began in December of that year to represent African workers as well as the white and coloured women in the plants. Engels employed an African organizer for the union at Pretoria and solicited complaints from these workers. She uncovered a sorry situation: "The Government... expects this starving worker to pay Poll Tax, support a wife and children, acquire clothes, purchase tobacco and pay for entertainment on the scandalous wage of L1.4 per week." The stories of these workers were far more unjust than those of the white women, but rang with the same attitude by the employers: complete disregard for the employees and deep suspicion of their motives and actions. Engels complained of several cases where injured African workers were simply fired. 52 Accounting for 5-6,000 employees at the various Mint branches, African workers represented the vast majority and their organization would clearly add weight to any demands made by the women. Further, they were the group most likely to replace the women in the "deskilled" positions created during the war. Events would soon overtake the union, however, before such organization could take place.

In March 1945, just as the war was drawing to a close in Europe, the Pretoria Mint loading field was hit by an accidental explosion which killed or injured at least 250 workers and effectively closed down production at the Mint. The remaining workers at Pretoria were put on half time and eventually let go. The coloured female workers at the Kimberley branch of the Mint, numbering over 1500, were let go and offered little hope by the government with the Prime Minister's office complaining of "the problem of placing ex-domestic coloured servants who are insistent that their future employment should be as favourable as with the Mint." 53 While Frances Engels continued to try to get some compensation for her union's members for injuries in the explosion, she could do little to find them new employment. With most members dismissed by 1946, the SA Mint Employees Union was dissolved.

The AEU had attempted to control the influx of females into the engineering industry through the establishment of the WIFWU and, in the case of the Mint employees, had successfully limited their entry to skilled jobs. The Mint employed the women in "deskilled" positions; that is, repetitions of one aspect of a multi-skilled journeyman's job and at exceedingly low wages which even undercut the emergency workers. Machines and tools had been adjusted for greater repetition work, facilitating these operations. And due to the nature of the Mint--government owned and operated and producing only munitions--there was little threat that the employer

would try to continue such labor practices beyond the war. In this case, the labor unions succeeded in protecting their positions.

Women in the Private Sector

But what of the numerous, scattered private workshops where war work and commercial production intermingled and the temptation to use cheaper workers to generate profits and undercut labor was the greatest? The WEWU had been completely unsuccessful in recruiting women at the private workshops. The primary problem for the union was that the private workshops were supposedly allowed to obtain female employees only through the government as emergency workers and that such workers should be under the Controller of Industrial Manpower, and thus not subject to union organization. Although they were designated as temporary and thus posed no proximate threat to the union, their duties and pay--if uncontrolled--could establish serious long term precedents for the Union. The bulk of women at the private workshops were recruited in this manner, and control over them and their conditions of employment was difficult to enforce with few of these women showing any interest in bringing to the government's notice their employment in journeyman positions or at higher pay.

Throughout the war, women were employed in engineering workshops in a variety of positions. Some worked in the government "annex" factories, private firms provided with equipment necessary for war production by the government. By November 1944, the annex factories employed over 1596 "European females," 1596 "European" males and 4207 "Non-Europeans."⁵⁴ These firms included some of the largest engineering firms in the country, including Stewarts and Lloyds, Alpha Harris and Herbert Evans as well as the mines workshops at Crown Mines and Witwatersrand Goldmining. And women were showing up in other private workshops which had contracts for war work. Among those were several gold mines which pushed to use the women on a variety of operations. In August 1942, Randfontein Mines began to use the women on core making--the preserve of the moulders--for commercial use. The issue came to the attention of the DMS who protested and the Controller of Manpower agreed that "if the Management are successful in this during the war they will fight very hard to retain the employment of women at reduced rates after the war as a right...I am of the opinion that [management] and perhaps others also, have their eyes on the future."⁵⁵

Likewise, many employers rebuffed any government control, including the SAR which refused to allow the Controller of Manpower representative into the workshop and the Chamber of Mines which began informing mines in August 1942 that they did not need to obtain government permission to hire female workers.⁵⁶ When the inspector was allowed in, it was only to insure that certain requirements for rest room facilities, lunch breaks, etc. were being met. The inspector, Mrs. Cameron-Swan, discovered women working in tool rooms on gauges and lathes, welding, fitting and turning--all tasks normally reserved for journeymen--at emergency workers wages.⁵⁷ She noted, "I am very disturbed at the different wages being paid for the same work. Some mines begin 1/5 per hour on all work. Some firms pay 2/- and 2/2 for same work. Industrial Council rates do not always agree with AEU."⁵⁸ Even the Post Office resisted government control and policies stating categorically that they were introducing women into certain types of work with the intention of keeping them there permanently: "The object of the introduction of female labour was to train young women for engineering workshop duties which are more

on machine tools now used for war production but later on for production of civil needs."⁵⁹ The control of female labor by the government was flouted by employers and employees alike as the pressures to change the labor structure mounted.

As the war went on, certain official concessions were made in addition to the countless unofficial infractions of labor agreements and regulations. The major compromise was made by the Iron Moulders when in 1942, the Controller of Manpower managed to get the Union to agree to allow women to work on light core making. The government argued that "this type of work is largely automatic, and the woman would produce as much or perhaps more than the male." The positions were classified as journeyman's and wages set at 2/- to 2/2 per hour.⁶⁰ At the same time, the AEU was frantically reporting the continuing diversion of female emergency workers to regular mining operations, with little success.⁶¹ In fact, the inspector, A.C. Payne, noted in a report of women in the tool room at West Rand Engineering, "It was of interest to hear that one of the women workers was the best operator on the job."⁶² Indeed, by January 1943 the Controller of Industrial Manpower announced that women should be trained as fitters and turners (journeymen) and that "It is not intended to utilise the services of these persons in work of a repetitive nature similar to that of operatives but it is desired that they should perform the duties usually assigned to journeymen."⁶³ At that time, COTT instituted two special courses for women: Fitters Course for Civilian Women (16 weeks) and Machine Tool Operators Course for Civilian Women Personnel (20 weeks).⁶⁴ Indeed, by March 1944, the Controller's representative in Cape Town actively promoted the use of women: "I am determined, despite the timorous attitude of the Employers, to make use of women in the Engineering Shops ... and have been forcing my intentions on the shops who are consistently asking for additional turners."⁶⁵

In many cases, it appeared that employers were moving rapidly to shift the women into regular commercial work. Randfontein Mines began using female emergency workers to produce steel casings for its tube mill in July 1944 and Central Engineering moved females to commercial work February 1945.⁶⁶ The AEU tried to get some control over the situation by unsuccessfully requesting that the Industrial Council take control over these workers away from the Controller of Industrial Manpower.⁶⁷ The Controller held on, however, while some of his officials expressed frustration over the mounting pressure to move the women into commercial work: "if we establish a precedent in allowing one firm a contravention, where will it end?"⁶⁸

Postwar Planning

Indeed, the primary concern of the government from 1943 on was the impending chaos in the labor market once the war, and employment in the military and in the war industries, came to an end. The government's fear was that the 150,000 white soldiers who were employed in the military as well as an estimated 60,000 civilians on domestic war work would all be thrown out of jobs as soon as hostilities ceased.⁶⁹ In early 1943, the DGS organized a Reconstruction Corporation to "dispose of government factory assets" and workers and found the prospects for

59. Chief Engineer Post Office to Controller Industrial Manpower, 14 September 1942, doc 137, SCIV Part 1, ARB 1959.

60. A.C. Payne to Controller, 9 November 1942; Representative to Controller, 4 March 1943, doc 137, SCIV Part 1, ARB 1959.

61. AEU to Controller, 24 January 1943, doc 137, SCIV Part 1, ARB 1959.

such workers so worrisome that it proposed to keep them on "uneconomic" work rather than face the possibility of these workers on the dole.⁷⁰ By 1944, the DGS was becoming increasingly concerned about the situation, believing that it would be economically unfeasible to continue wartime production simply to provide jobs and that the conversion of munitions plants to peacetime production was merely wishful thinking.⁷¹ As the Director of Technical Production warned, private manufacturers should begin planning and ordering their plant from overseas rather than making a "fetish of the use of war plants for peacetime production for which they are not suitable."⁷² Nevertheless, Minister of Labour Madeley warned in September 1944 that in order to provide adequate employment after the war, "a certain amount of [government] interference with private enterprise" would be necessary.⁷³ The government feared an impending crisis which would not be allayed by private enterprise.

Much of the government's fear had to do with the changed nature of industrial production and the possible expectations of returning white males. During the war, the greatest increase in employment took place in the engineering industry, with the increase in white female and African male employment leading the way; however, these workers had not necessarily taken these jobs from white males. Indeed, government planners canvassed all manufacturing and engineering industries involved in war production regarding prewar and expected postwar employment and discovered that an estimated 10,000 white males had left these industries for military service out of a total labor force of nearly 300,000. Engineering reported a loss of only 1711 white males to the war, no doubt due to the heavy control over artisans. Most interesting, the firms estimated increased employment after the war of at least 10,000 white males, primarily in the clothing and textile industries.⁷⁴ In other words, the vast bulk of the returning soldiers had never been employed in the industries which the government now feared would be inundated by them. And any that had been displaced would be easily re-absorbed.

What the government feared was the continuation of an alarming trend: the "concentration of industry, trade and finance in a few areas, with the usual congestion as an undesirable corollary, while large areas of the country are becoming economic and cultural waste land." By 1936, 43% of the white population was in the major cities of South Africa, as compared with only 30% in 1904. Nevertheless, whites were outnumbered by Africans in these areas by 1936, 1.4 million to .9 million. Several government advisory boards and commissions--Board of Trade and Industry, Social and Economic Planning Council, Industrial and Agricultural Requirements Commission, Rural Industries Commission--all recommended broadening both the location and nature of industry in order to avoid massive congestion and competition in the major urban areas as "If our people are given the proper guidance in the development of their country with a view to the raising of their standard of living and, consequently, of their cultural attainments, there will be less inclination in the wider and wider circles to concentrate on racial and sentimental politics."⁷⁵ The government did not relish the prospect of increased enmity on the part of Afrikaners, fleeing depressed economic conditions in the countryside and finding English owned businesses employing Africans. Especially because jobs in the engineering industry were tied to the most important industry in the country: mining. "In a final analysis the whole economic structure of the Country still depends on Gold mining activity.... Gold Mining, directly or indirectly, creates the main basic demand for Engineering products and in formulating an industrial policy we can only do so on the assumption that for many years to come there will be no diminution in Mining

70. DGS Meeting on Postwar Reconstruction, 4 and 7 February 1943, 60/ SEC 94, Central Archives Pretoria.

71. DGS in Waterman, 1 February 1944, MED Volume 28.

72. Minutes, Advisory Committee on Post-War Re-Adjustment and Development in the Engineering and Chemical Industries, 11 August 1944, MED Volume 27.

73. Minutes DGS Management Committee, 26 September 1944, MED Volume 29.

74. Manoe, Employment Statistics extracted from questionnaires issued by the DTI in October 1943 and compiled by Secondary Industries, 12 September 1944, MED Volume 29.

75. IDC, Preliminary Report of Economic Advice on Re-establishing New Industries in South Africa, 19 July 1943, 3/25 volume II, MED Volume 22.

activity.⁷⁶ Replacing low cost workers--white women and African males--with unskilled, highly paid and politically active white males threatened the future of the engineering industry, the profitability of mining and the stability of the government.

The government was particularly interested in utilizing African labor to expand industry and generate profits after the war. In the early years of the war, the IARC had privately come to the conclusion that "Industrial expansion was crippled and we could never hope to become economically prosperous unless the Non-Europeans were brought into more skilled work in industry and used more extensively."⁷⁷ Continuing discussions in government circles during the war repeated the argument that "The native is good material for all gradations of labour, from unskilled to semi-skilled, and in time he may be rendered capable of filling, to some extent, the ranks of skilled labour."⁷⁸ Yet the question remained, in what capacity and at what cost?

As the war drew to a close in 1944 and 1945, the government began to "interfere" in the economy to avoid direct conflict over the allocation of jobs. The first group addressed was the females who had flocked to wartime production, not from patriotism, but from necessity. At the end of 1944, the government noted a "number of platteland girls who have no job to return to" and "that it is desirable not to increase a certain inevitable drift of women to the town after the war." The suggestion was made that they find employment in "many corps" as waitresses, dressmakers and hairdressers.⁷⁹ The women were not eager to seek such employment, however, prompting the government to attempt to get rid of them by giving them a one-way rail pass when they were dismissed.⁸⁰ This was especially appropriate at some of the largest plants with female labor, such as Stewarts and Lloyds and the Mint where women had been recruited from rural areas and housed in hostels near the factories. The women still resisted, prompting a suggestion by one government official to offer them a bonus payment, redeemable only in their "home district."⁸¹

In addition to the war workers, the government was getting ready to release females from the military who were also eager to enter the civilian job market. While the government kept the soldiers to assist in demobilization, the war workers were released beginning April 1945. Complaints were made by the military which claimed that clerical positions were being taken up by the civilians to the detriment of the enlisted females.⁸² In judging the postwar employment of white females, Berger agrees that most went into clerical work after the war, and indeed government figures show a marked increase in white female clerical workers and stagnant figures in industry after the war.⁸³ It is also true, however, that many of these women returned to rural poverty and there is evidence that some worked as agricultural laborers on the estates surrounding the industrial center of Vereeniging.⁸⁴

The largest growth in postwar engineering and manufacturing jobs took place under government control and brought about the largescale introduction of African males into the "deskilled" and fluid positions opened up during the war. Iscor, the government owned and operated steel plant, extended its operations, creating a town--Vanderbijlpark--for a new plant as well as several subsidiaries. One of the new companies, Vecor, offered government planners hope

76. Post-War Re-Adjustment and Development in the Engineering and Chemical Industries, by J.M. Osborne, 14 June 1944, MED Volume 27.

77. Discussion of IARC on Labour and Related Topics, October 1941, Papers of the Industrial Manpower Commission, Bc 823.

78. "Increasing the Productive Capacity of the Native Labour of the Country," 3 April 1943, SEC 65/6, SEC 95.

79. WADC Section to Lt. Col. Cochran, 8 December 1944, 412/15 DGD 236, Central Archives Pretoria.

80. DGS to Secretary, Labour, 20 May 1945, 1612/17-200 ARB 1816.

81. Women's Employment Officer to Divisional Inspector Department Labour, 26 July 1945, 1612/17-200 ARB 1816.

82. DGD to Adjutant-General, 7 September 1945, 412/15 DGD 236.

83. Berger, *Threads of Solidarity*, pp. 133-137; *Using Statistics for 1945 Years*, p. G-8.

84. Personal communication, Andre van Nieuwerk.

that more jobs would be created for the engineering industry.⁸⁵ Indeed, the government intended to hire at least 500 machinists, 800 fitters and perhaps 600 more operatives for Vecor. In particular, the new plant called for "single machine men," working an hourly wage and piecework, not as often for the female engineering workers.⁸⁶ Although initial plans called for COTT training, such plans fell through and the workers, some white and many black, were trained on the job.

In addition to Vecor, the government also established manufacturing factories in the "border areas" for the exclusive use of African labor. Beginning in 1943, the IDC began plans to establish cotton textile and woollen factories in rural areas. The express purpose was to use African labor, despite all of the concern over unemployment of rural whites. The cotton factory in particular was placed adjacent to a Native Reserve and the Native Affairs Department built a model "settlement" for African workers. The IDC intended to pay these workers wages far lower than those in the urban centers and, more importantly, to introduce African males into operative positions in this relatively remote area.⁸⁷

Conclusion

With white women out of the picture, it is easy to see the shift from the prewar labor structure to the shifting categories of postwar industrialization as a logical phenomenon. However, this transition was aided less by the actual changes in technology which were not as determinant as it may seem, but by the ongoing pressures of war and negotiations over power which took place in union and government offices as well as on the factory floor. Gender provided an easy transition category as the female workers were assumed to be temporary and relatively disposable, less "able" than white males to do the job and non-threatening in terms of any precedents that could be set. They fit perfectly into the unions' insistence on skill, not race, as the primary focus of labor organization. However, the deskilling and devaluing of these tasks set a precedent which could be and was later applied in terms of race.

85. Minutes, Advisory Committee on Post-War Re-Adjustment and Development in the Engineering and Chemical Industries, 11 August 1944, MED Volume 27.

86. Vecor to Controller, 22 March 1945 and Chief Inspector Labour to Controller, 23 March 1945, 1612/1/17-6j, ARB 1770.

87. Minutes of Meetings, Industrial Development Corporation, 8 February 1946, 5, 6 March 1946, and 11 April 1946, 506/1/3 volume 3 HEN 3213, Central Archives Pretoria.